

**Campbell County**

**Municipal Solid Waste Planning Region**

**2006 Qualitative Review**



**Tennessee Department of Environment and Conservation**  
**Division of Solid Waste Management**  
**Solid Waste Assistance Programs**  
**401 Church Street, 5th Floor**  
**Nashville, Tennessee 37243**

## Introduction

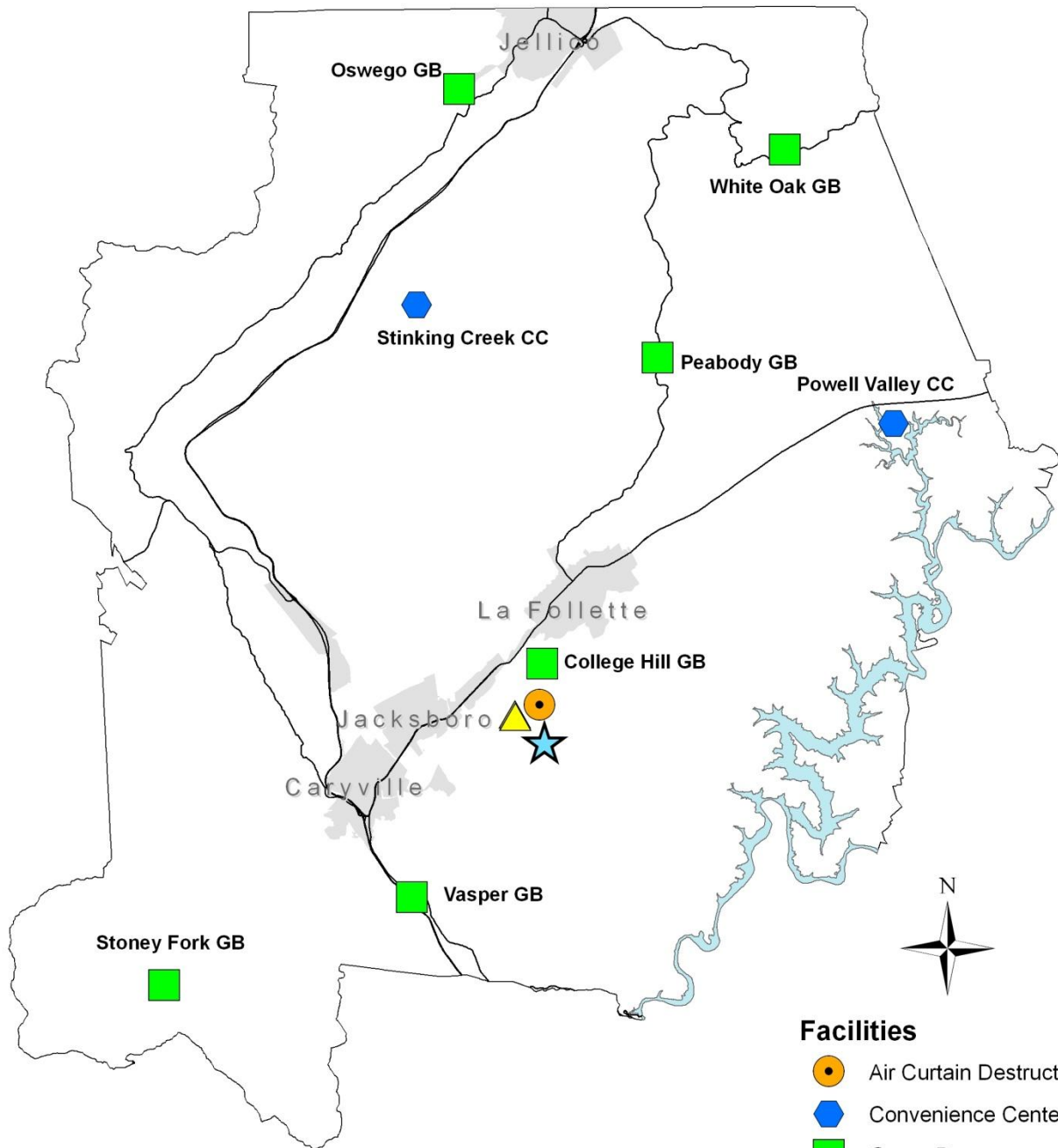
Tennessee's *Solid Waste Management Act of 1991* (SWMA) requires solid waste regions to achieve a twenty-five percent (25%) waste reduction goal for solid waste going into Class I landfills by December 31, 2003. Under T.C.A. § 68-211-861, the basis for determining compliance with this reduction goal is based on a per capita reduction measurement that may be adjusted for economic or population trends, or by a qualitative assessment that evaluates whether the region had comparable progress to those of similar regions that made the waste reduction goal based on the per capita methodology. Until 2003 the need to define the qualitative assessment was not necessary since there were no regions out of compliance. After the 2003 reporting period, 34 regions failed to meet the 25% waste reduction goal, which necessitated the promulgation of rules describing the methodology for qualitative assessment of regions failing to meet the per capita base year reduction. These rules became effective August 6, 2006.

The first step in the qualitative assessment process is to determine if the failing region met the waste reduction goal using the real-time methodology. This method is calculated annually by dividing the total amount recycled or diverted from Class I landfills by the total generated waste stream. If the region did not meet the 25% goal through this process, the region is then reviewed in order to determine if a "good faith" effort was made toward compliance and if their programs and solid waste infrastructure are qualitatively equivalent to like regions of similar population and economic characteristics who have achieved the goal.

In 2006, five regions failed to meet the goal by either base year or real-time methods. With a base year reduction of -25% and a real-time comparison of 18%, Campbell County Municipal Solid Waste Planning Region was one of those regions. Campbell County, along with the four other regions who failed to meet the goal, were compared to equivalent regions who met the goal on a base year (per capita) method in 2006 and who have similar population size and economic characteristics. The comparison regions for these assessments were Cocke, Grainger, Hardeman, Humphreys, Lawrence, Lewis and Van Buren.

Pursuant to these rules, on May 6, 2008, Wayne Brashear, Bob Knight, Nick Lytle and Matt Maynard from the Division of Solid Waste Management visited the county and met with County Mayor Jerry Cross, Solid Waste Director Clifton "Tip" Jones, Recycling Coordinator Dan Murray, Jacksboro Mayor's assistant Lloyd Shelton, Jellico Mayor Forster Baird and LaFollette City Manager David Young to discuss all facets of the region's solid waste management program. Visits were made to the three convenience centers, six county public collection receptacle or "green box" sites, the transfer station, materials recovery facility (MRF) and the air curtain destructor. The equipment and facilities at each of those sites were examined and noted. Future facility and equipment needs for the programs were reviewed by staff at time of visit and financial statements were obtained from the county and the municipalities.

# Campbell County Solid Waste System



## Facilities

-  Air Curtain Destructor
-  Convenience Center
-  Green Box
-  MRF
-  Transfer Station

\*As of May 6th, 2008

## Solid Waste Programs and Infrastructure

Every county in Tennessee is required by law to provide both a minimum level of waste reduction and also waste collection assurance. The solid waste and recycling collection programs of the Campbell County Solid Waste Planning Region serve a population of 40,848 and an area of 498 square miles. The minimum number of convenience center sites required by state statute, based on Campbell County's population, is calculated at two sites. The region satisfies these requirements through the following systems:



Oswego Convenience Center

Campbell County operates three convenience centers located on Towe String, Powell Valley and Stinking Creek Roads. Each location utilizes front-end loader boxes to collect municipal solid waste. After collection and compaction the municipal solid waste is taken to the county's transfer station for consolidation and transportation to Volunteer Landfill located in Scott County. Paper, plastic, glass, mixed metals and used oil are accepted at all convenience center and "green box" locations. Recyclables are collected through the use of co-mingled roll-off boxes which are taken back to the materials recovery facility for sorting and processing.

In addition, the county operates six public collection or "green box" sites located in the College Hill, Oswego, Peabody, Stoney Fork, Vasper, and White Oak communities. These locations are unpermitted, therefore are classified as "green box" sites by TDEC until such time as permit applications are filed and accepted. Each of the sites provides for collection of municipal solid waste and recyclables through the same methodology as the permitted convenience centers, with the exception of the Stoney Fork site, which is geographically isolated from the rest of the county and services a low number of residents. The sparse population and poor accessibility to the Stoney Fork community makes transportation of recyclables impractical. All sites were fenced and manned with signage stating policies and operating hours. Information on regulations concerning

“green box” sites and permitting of convenience centers can be found in the “Corrective Action” section of this report.

The Cities of Caryville, Jacksboro, Jellico and LaFollette all provide curbside waste collection to residents. City operated trucks collect the waste and transport it to the county’s transfer station for processing. This is the extent of the municipalities’ handling of municipal solid waste.

During the visit, no illegal dumping of municipal solid waste was observed. The solid waste programs of the region appear to provide for adequate collection assurance based on these observations.

In addition to the public collection facilities, the county operates a materials recovery facility (MRF) in conjunction with the convenience center and transfer station located on Towe String Road. This facility is conveniently located for the processing of materials from all areas of the county. The MRF contains an elevated pick-line to sort comingled recyclables and eliminate contaminants from single stream loads. The MRF also utilizes a forklift, skid steer loader with grapple bucket, and horizontal baler to process commodities.



**Materials Recovery Facility with Unbaled OCC**

In 2006, Caryville and Jacksboro provided curbside collection of comingled recyclables to their residents. Materials were then transported to the Towe String Road MRF for processing.

According to the 2006 Annual Progress Reports (APR), the MRF processed the following materials collected within the Region:



1,011 Tons Mixed Metals  
1,031 Tons Corrugated Cardboard  
206 Tons Newspaper  
20 Tons Glass  
19 Tons Plastics

Assuming 264 working days in a year, the MRF processed 8.7 tons per day during calendar year 2006.

The region operates an air curtain destructor and a tub grinder for processing wood waste located at the Towe String Road location. The tub grinder is utilized for brush and smaller wood wastes suitable for mulching. Mulch produced is not marketed for sale but is used for various public projects. Material deemed not suitable for grinding due to size, type or quantity is placed in the air curtain destructor. Both pieces of equipment are utilized for wood waste management and diversion from landfilling.

The County Solid Waste Department employs a full time solid waste director and a recycling coordinator. By employing both a solid waste director and a recycling coordinator, Campbell County is able to have a greater level of management over the day-to-day operations of all aspects of their solid waste systems. Direct oversight of routes, collection schedules, materials marketing and public education allows the program to operate more efficiently and aids in financial stability. The municipalities in the region that provide for residential solid waste collection is managed by the public works departments without a dedicated solid waste director.



Baled Commodities

## Financial Information

T.C.A. § 68-211-874(a) states that each county, solid waste authority and municipality shall account for financial activities related to the management of solid waste in either a special revenue fund or an enterprise fund established expressly for that purpose. The solid waste financial information of Campbell County was examined by department staff. From a solid waste system management standpoint, the expenditures and revenues appear to be in line with state mandates. Campbell County's solid waste revenues and expenditures were found to be financially solvent

<b>Expenditures</b>	
Solid Waste Management	\$312,914
Solid Waste Education	\$87,891
Convenience Centers/"Green Boxes"	\$1,258,858
Transfer Station	\$37,999
Recycling Center	\$272,433
Other	\$125,660
<b>Total</b>	<b>\$2,095,755</b>
<b>Revenues</b>	
Local Taxes	\$2,020,808
Licenses and Permits	\$14,398
Charges for Services	\$57,332
Other Revenues (Including Sale of Recyclables)	\$132,222
State of Tennessee (Grants)	\$72,294
<b>Total</b>	<b>\$2,297,054</b>

## Solid Waste Planning Board

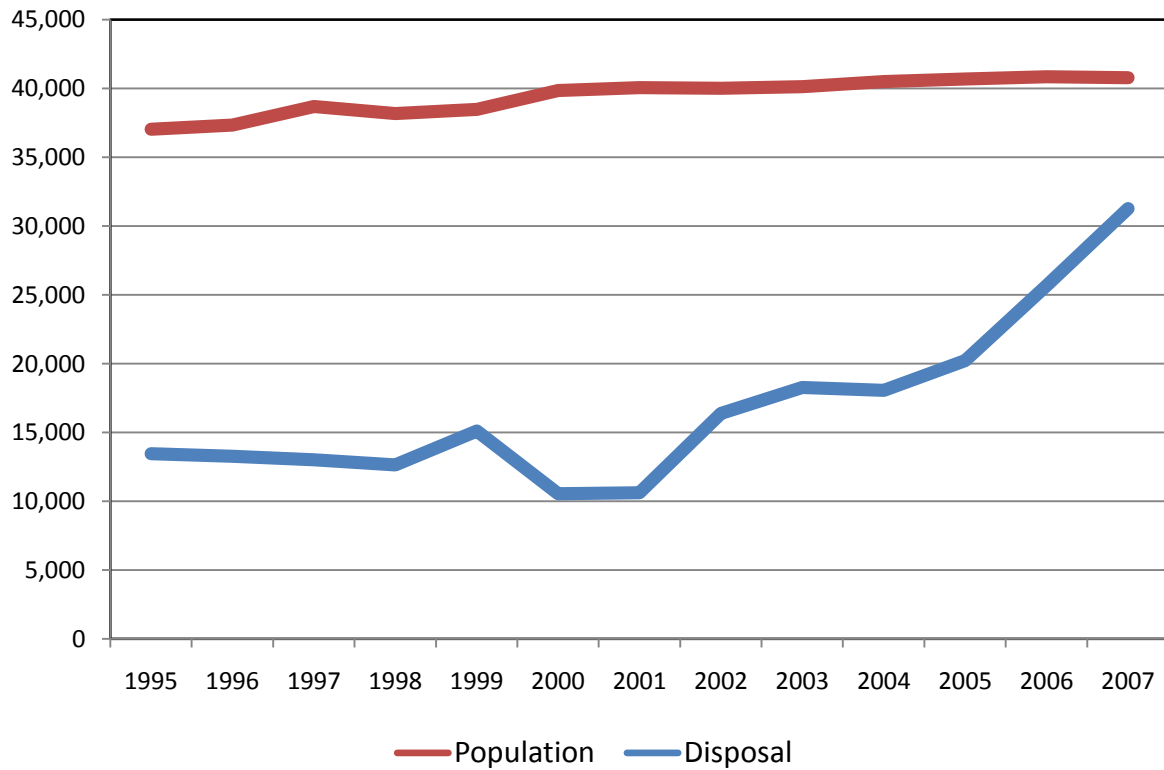
The Solid Waste Management Act states that every solid waste region in the state must appoint a solid waste planning board, composed of representatives of each county and each city which participates in a solid waste planning region. The Municipal Solid Waste Planning Region Board is tasked with accurately reviewing and approving annual progress reports. Also, they are instrumental in the approval process of any new solid waste permits for the region. At a minimum, having an active board that meets with regularity is vital to complete these tasks. The planning board is also needed to develop ten year plans, assess disposal capacity and collection assurance, provide for solid waste education, and assist in other aspects of integrated solid waste management. Duties and powers of the solid waste planning board are spelled out in T.C.A. §§ 68-211-813 thru 815.

According to Campbell County's Mayor, the solid waste planning board is not active and does not meet.

## Statistics

Year	Population	Disposal	Tons Per Capita
1995	37,033	13,461	0.36
1996	37,340	13,257	0.36
1997	38,675	13,013	0.34
1998	38,163	12,641	0.33
1999	38,466	15,105	0.39
2000	39,854	10,546	0.26
2001	40,048	10,612	0.26
2002	40,013	16,387	0.41
2003	40,125	18,260	0.46
2004	40,507	18,050	0.45
2005	40,686	20,228	0.50
2006	40,848	25,678	0.63
2007	40,771	31,268	0.77

**Disposal Tonnage & Population**





## Analysis of local conditions

Historically, Campbell County's reported Class I landfill disposal tonnages listed in the Annual Progress Reports have been low when compared to counties of similar population and economic characteristics. In 1995, the State of Tennessee averaged 1.3 tons of municipal solid waste placed into Class I landfills per capita. In contrast, the Campbell County Municipal Solid Waste Planning Region reported 13,461 tons of waste going into Class I landfills, or 0.36 tons per person, which is exceptionally low. A 25% reduction of this value would require a disposal rate of 0.27 tons per person per year. It is the opinion of the reviewing staff that the accepted 1995 base year number for the region is inaccurate and in reality was much higher.

As can be seen in the preceding chart and graph, in the years from 1996 through 2001, the accepted disposal values for the region remained close to the base year number. The continuation of low values is an indication of both incomplete reporting by the region in the Annual Progress Reports and a lack of thorough reviewing of these reports by department staff. In speaking with Campbell County solid waste officials, it was indicated that the under-reporting of solid waste disposal numbers was due to a misunderstanding that they were only responsible for reporting county tonnages and not those of the municipalities and private haulers operating in the region.



Transfer Station

From 2002 through 2005, the amount of solid waste going to Class I landfills reported by the county increased as municipal and private waste began to be incorporated into the Annual Progress Report. The per capita values reported during this time, 0.41 to 0.5 tons per year, are still viewed by department staff as lower than expected. As Campbell County strives to increase collection assurance for its citizens through

increased curbside collection programs, more collection locations, education and enforcement to prevent illegal dumping and burning, disposal values could increase in spite of robust additions to the recycling programs.

In 2006, Campbell County reported primarily residential recycling tonnages in the APR and did not provide many commercial, institutional, or industrial recycling numbers. By reporting only one sector of the recycling programs within the region, the calculated real-time comparison value was only 18%. The real-time comparison method for measuring waste reduction is calculated by comparing all documented recycling and waste diversion programs against Class I landfill disposal. Therefore, the more documented recycling programs present in the region, the higher the real-time measurement.

The City of LaFollette, the largest population center in Campbell County, did not provide assistance in recycling efforts in 2006. Though not the only factor preventing further waste reduction, the lack of participation by LaFollette was a missed opportunity to significantly improve the waste reduction performance of the region. Prior to the completion of this qualitative assessment, Campbell County submitted its 2007 Annual Progress Report. This report indicated that LaFollette began a curbside recycling program in which the municipality picks up co-mingled recyclables and delivers them to the county MRF for separation and marketing. This new program was a contributing factor that increased publicly collected recycling amounts from 5,200 tons in 2006 to 15,977 in 2007.

There is concern among county officials that a significant amount of out of county waste is being credited to Campbell County in the Solid Waste Origin Report due to meandering private hauler waste collection routes; however, private hauler multi-county collection routes and the subsequent volumes and tonnages of this additional waste cannot be verified.

### **Corrective Action**

Immediate attention is required for the permitting of the six county public collection sites or “green box” locations. These locations (College Hill, Oswego, Peabody, Stoney Fork, Vasper and White Oak) apparently meet all the requirements of fully functional Convenience Centers but do not have the appropriate permits. The county must submit permit applications to the Department for these sites no later than March 1, 2009.

T.C.A. § 68-211-851(d)(1) states that no later than July 1, 1997, each county which maintains and uses receptacles for the collection of municipal solid waste from the general public at sites separate from a convenience center for the needs of residents of the county shall submit to the Department the location and operational information of these locations.

Furthermore, T.C.A. § 68-211-851(d)(3) states that a county which did not have receptacles in use on January 1, 1996, or which subsequent to such date discontinues use of any receptacle permitted, shall be prohibited from installing or maintaining additional receptacles after July 1, 1996. According to documents dated May 27, 1997, and signed by J. H. Willoughby, Executive Assistant for Campbell County, the region operated only one “green box” site located on Highway 297 in the Elk Valley community. Therefore, the above referenced public collection sites were not “grandfathered” and must be permitted.

Failure to submit the required convenience center permit applications by March 1, 2009, may result in a Notice of Violation.

### **Recommendations for Improvement**

The region has already made successful strides toward improving their waste reduction efforts as evidenced in the increase in reported waste diversion. Campbell County increased its real-time reduction rate from 18% in 2006 to 64% in 2007. Even so, the following are areas that the county should consider in moving forward:

- The City of Jellico should assist the region in waste reduction by taking a more active role in providing recycling opportunities to its residents (e.g., curbside recycling, centralized collection points, partnership with other governments, school and institutional programs). Any waste reduction programs instituted by the city should be communicated and reported through the regional Annual Progress Report.
- The region’s solid waste planning board needs to take a more active part in the county’s waste management effort, as provided by T.C.A. § 68-211-813(a)(4)(b)(1). In addition, the board should work to adopt resolutions prioritizing waste diversion as well as improving current solid waste disposal infrastructure and programs.
- The region should provide for the collection of electronic scrap (E-scrap) on a year-round basis. Relying on the once-a-year mobile household hazardous waste collection event to service the needs of all the residents is not a sustainable solution for this growing issue. There are currently contractors in East Tennessee who provide E-scrap recycling services at no cost or who pay for this material.
- Given the problems with incomplete submission of all regional disposal and recycling data discussed in the *Analysis* section, the region must take greater care to submit accurate information in the Annual Progress Report. Annual Progress Reports are now submitted online and have greater accessibility for counties to complete on their own. Historically, the region has relied upon the services of the East Tennessee Development District to complete their report;

however, greater accuracy can be obtained by having those persons directly overseeing the solid waste program submitting the data.



Scrap Metal Collection at Materials Recovery Facility Site

## Conclusion

T.C.A. § 68-211-861 requires each municipal solid waste planning region to achieve a twenty-five percent (25%) waste reduction goal for solid waste going to Class I landfills by December 31, 2003. Based on Campbell County's reported Class I disposal and tons diverted, the region failed to meet the required reduction goal for calendar year 2006. This failure caused the Department to qualitatively assess Campbell County's Solid Waste Planning Region's solid waste reduction program's activities and expenditures to determine if it was qualitatively equivalent to other comparative counties that did reach the waste reduction goal.

Campbell County Municipal Solid Waste Planning Region possesses programs, finances, infrastructure, education and staffing consistent with comparison regions. Furthermore, Campbell County Municipal Solid Waste Planning Region was superior to these regions due to the presence of several municipal curbside recycling programs which provided for a higher level of waste reduction service. After full review of the Campbell County Municipal Solid Waste Planning Region, it has been determined that the region and its local governments are qualitatively equivalent to like regions and is making a good faith effort towards waste reduction.